

STUDIES IN THE EUPATORIEAE (ASTERACEAE). LX.

A NEW GENUS, DYSCRITOGYNE.

R. M. King and H. Robinson
Smithsonian Institution, Washington, D.C. 20560.

The genus Dyscritogyne named here as new, provides another opportunity to test Eupatorian characters at the species level in comparison to the genus level. The genus contains two species which are unquestionably distinct, with a macroscopic difference in leaf shape and microscopic differences in corolla pubescence. The geographical ranges of the species seem to be close but not overlapping. Still, the two species are strikingly alike in their slender erect stems, short-petiolate leaves, multiseriate imbricate phyllaries, densely glandular achenes, glabrous corolla lobes, anther collars with very numerous short quadrate cells and style branches very broadly strap-shaped. It is clear that the differences between the two species are of a totally different order than those used here to distinguish the genus.

The genus Dyscritogyne would fall in the large complex we call Critonioid and is perhaps close to the genus Steviopsis of the same general region. The latter genus does have similar glabrous corolla lobes and broad style branches, but has eximbricate phyllaries and whorled leaves. The imbricate phyllaries and the scattered hairs inside the corolla of one species suggest a far more remote relationship to the so called Eupatorium niveum of the Andes. The latter species and its close relatives are distinct by the glands on their corolla lobes and by their highly developed carpopodia.

The genus is rather distinctive by its broad style branches but is even more distinct in the thickness of the base of the style. In some cases the stylar base shows very slight papillosity unlike anything seen in other genera. The generic name is inspired by these distinctive features of the styles along with the remarkably glandular achenes.

Dyscritogyne R.M.King & H.Robinson, genus novum Asteracearum (Eupatorieae). Plantae herbaceae erectae raro ramosae. Caules teretes leniter striati glabri. Folia opposita vel alterna breviter petiolata, laminis ovatis minute glanduliferis basi rotundatis vel truncatis ad apicem acutis margine subserrulatis. Inflorescentiae laxae paniculatae interdum corymbosae; pedicelli longi graciles. Involucri squamae subimbricatae ca. 35-40 glabrae valde inaequilongae ca. 4-6-seriatae basilares perbreves; receptacula plana vel leniter convexa glabra. Flores 11-16 in capitulo; corollae anguste infundibulares 5-lobatae

extus glabrae intus glabrae vel pauce hirsutae, cellulis oblongis parietibus exterioribus sinuosis, lobis aequilateraliter triangularibus extus et intus laevibus; filamenta antherarum in parte superiore incrassata, cellulis plerumque quadratis vel brevioribus, parietibus intricate ornatis, cellulis exothecialibus subquadratis vel brevioribus, appendicibus antherarum oblongis vel ovatis; styli incrassati inferne non nodulosi glabri vel pauce papilloso, appendicibus taeniatis sublaevibus; achaenia prismatica 4-5-costata valde glanduloso-setifera; carpopodia nulla; pappus setiformis uniseriatus vel biseriatus, setis ca. 35-40 rigidis scabris ad apicem non vel leniter dilatatis, cellulis apicalibus acutis.

Species typica: Eupatorium adenospermum Schultz-Bip.

Key to species of Dyscritogyne

1. Leaves narrowly ovate to lanceolate, often alternate;
corollas with scattered hairs inside. D. adenosperma
1. Leaves broadly ovate, opposite; corollas glabrous inside.
D. dryophila

Our studies of the genus indicate that it contains the following two species.

Dyscritogyne adenosperma (Schultz-Bip.) R.M.King & H.Robinson,
comb. nov. Eupatorium adenospermum Schultz-Bip. Seem. Bot.
Voy. Herald 299. 1854. Mexico.

Dyscritogyne dryophila (B.L.Robinson) R.M.King & H.Robinson,
comb. nov. Eupatorium dryophyllum B.L.Robinson, Proc. Am.
Acad. 36: 478. 1901. Mexico.

Acknowledgement

This study was supported in part by the National Science Foundation Grant GB- 20502 to the senior author.